AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Currently Amended) A scrap submergence device comprising:

a body defining a submergence chamber comprised of a refractory material, wherein said body comprises a side wall and a base, the side wall including an at least substantially vertically oriented passage, and the base including an at least substantially vertically oriented passage aligned with the passage in the side wall, at least one linearly upward sloped inlet ~~passage~~ channel and one discharge ~~passage~~ channel;

a frame member surrounding a portion of said sidewall remote from said base, the frame further including a flange positioned adjacent a top edge of said submergence chamber, said flange including an opening aligned with said vertically oriented passage;

a rod in the at least one passage, wherein the rod ~~is inserted~~ extends ~~into~~ through the flange opening the at least one side wall passage and ~~received by~~ the at least one base passage,

wherein said rod is placed under tension to impart a compressive load on the body and secure said frame to the body.

2. (Original) The device of claim 1, further comprising a biasing member disposed at one end of the rod for applying a compressive force on the body.

3. (Original) The device of claim 2, further comprising a retaining element at an end of the rod opposite the biasing member.

4. (Cancelled)

5. (Currently Amended) The device of claim 4, wherein the inlet ~~passage~~ channel is at least substantially tangential to an inner surface of the submergence chamber.

6. (Original) The device of claim 5, wherein the body defines an outlet opening at substantially a same height within the submergence chamber as an inlet opening.

7. (Currently Amended) The device of claim 1 ~~further comprising a~~ wherein the side wall ~~element~~ and ~~a~~ the base ~~element~~ are interconnected via the rod.

8. (Cancel).

9. (Original) The device of claim 1, further comprises a plurality of rods within passages in said body.

10. (Currently Amended) A metal scrap submergence device comprising:

a body comprising a side wall and a base, the side wall including an at least substantially vertically oriented passage, and the base including an at least substantially vertically oriented passage aligned with the passage in the side wall;

a frame surrounding at least an upper portion of said body, the frame including a flange having at least one hole aligned with said passage in the side wall;

a rod received in both of the passages and the hole in the flange securing said side wall to said base;

an inlet passage disposed in the base for allowing molten material to enter the scrap submergence device; and

an outlet passage disposed in the base for allowing molten material to exit the scrap submergence device.,

wherein said inlet passage is substantially tangential to said side wall creating a vortex flow of molten metal.

11. (Original) The device of claim 10, wherein the side wall is removably mounted to the base.

12. (Original) The device of claim 11, wherein the one of the side wall and the base includes a notch and the other includes a cooperating protrusion received in the notch when

the side wall and the base are joined.

13. (Original) The device of claim 10, further comprising means for controlling vortex flow of molten metal inside the submergence device.

14. (Original) The device of claim 10, further comprising an outlet extension tube connected to the body and in communication with the outlet passage.

15. (Original) The device of claim 10, further comprising a riser tube extending upwardly from the base and in communication with the outlet passage.

16. (Original) The device of claim 10, wherein the body defines a gas injection inlet in communication with the submergence device and an associated gas source.

17. (Cancel)

18. (Cancel)

19. (Cancelled)

20. (Cancel)

21. (Currently Amended) A furnace comprising:

a submergence device well;

a pump well in communication with the submergence device well;

a dross well in communication with the submergence device well;

a removable submergence device of claim 1 disposed in the submergence device well ~~including a body comprised of a refractory material that defines a submergence chamber, the body including at least one passage and a rod in the passage, wherein the rod is placed under tension to impart a compressive load on the body~~ .

22. (New) The device of claim 1 wherein the frame further includes pockets.

24. (New) The device of claim 1 wherein a spring and nut secure the flange to said submergence chamber.

25. (New) The device of claim 10 wherein a spring and nut secure the flange to said submergence chamber.